

CLAIMS

1. A radio access communication system including a plurality of radio base stations, and a radio terminal capable of communicating with said radio base stations, said system characterized in that:
5 each of said plurality of radio base stations has transfer means operative when each said radio base station is connected to said radio terminal before a handover for changing a radio base station to which said radio terminal connects, for transferring a communication context required
10 for a communication with said radio terminal to another radio base station to which said radio terminal is connected after the handover.
2. The radio access communication system according to claim 1, wherein said communication context comprises a plurality of pieces of
15 context information of different types.
3. The radio access communication system according to claim 1, wherein said transfer means is responsive to a request from said radio terminal for transferring said communication context to the radio base station
20 to which said radio terminal is connected after the handover.
4. The radio access communication system according to claim 1, wherein said communication context is transferred between said radio base stations in one of a one-to-one communication or a one-to-multiple
25 communication at the handover of said radio terminal.

5. The radio access communication system according to any of claims 1 to 4, wherein:

said communication context comprises a plurality of pieces of context information of different types related to said radio terminal, and a context information identifier; and

said context information comprises a sub-context identifier and sub-context information.

6. The radio access communication system according to claim 5, wherein said context information includes at least one of terminal capability information indicative of functions of said radio terminal, authentication information corresponding to said radio terminal, encryption information, communication quality information indicative of a communication service quality, and header compression information utilized when a header of transmission/reception data is compressed.

7. The radio access communication system according to claim 5, wherein said sub-context information includes at least one of data flow identification information, an ensured delay time, a requested delay time, an ensured communication bandwidth, and a requested bandwidth.

8. The radio access communication system according to claim 5, wherein said sub-context information includes at least one of compressed header information, and mask information indicative of a position of a header

to be compressed.

9. A radio base station capable of communicating with a radio terminal, characterized in that:

5 said radio base station has transfer means operative when said radio base station is connected to said radio terminal before a handover for changing a connection partner of said radio terminal, for transferring a communication context required for a communication with said radio terminal to another connection partner of said radio terminal after the handover.

10 10. The radio base station according to claim 9, wherein said communication context comprises a plurality of pieces of context information of different types.

15 11. The radio base station according to claim 9, wherein said transfer means is responsive to a request from said radio terminal for transferring said communication context to a radio base station to which said radio terminal is connected after the handover.

20 12. The radio base station according to claim 9, wherein said communication context is transferred between said radio base stations in one of a one-to-one communication and a one-to-multiple communication at the handover of said radio terminal.

25 13. The radio base station according to any of claims 9 to 12,

wherein:

said communication context comprises a plurality of pieces of context information of different types related to said radio terminal, and a context information identifier; and

5 said context information comprises a sub-context identifier and sub-context information.

14. The radio base station according to claim 13, wherein said context information includes at least one of terminal capability information indicative
10 of functions of said radio terminal, authentication information corresponding to said radio terminal, encryption information, communication quality information indicative of a communication service quality, and header compression information utilized when a header of transmission/reception data is compressed.

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15. The radio base station according to claim 13, wherein said sub-context information includes at least one of data flow identification information, an ensured delay time, a requested delay time, an ensured communication bandwidth, and a requested bandwidth.

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16. The radio base station according to claim 13, wherein said sub-context information includes at least one of compressed header information, and mask information indicative of a position of a header to be compressed.

25 17. A handover control method for a radio access communication

system including a plurality of radio base stations and a radio terminal capable of communicating with said radio base stations,

said method characterized by comprising the step of providing each of said plurality of radio base stations with a step of transferring a communication context required for a communication with said radio terminal from a radio base station connected to said radio terminal before a handover for changing a radio base station, to which said radio terminal connects, to another radio base station to which said radio terminal is connected after the handover.

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18. The handover control method according to claim 17, wherein said communication context comprises a plurality of pieces of context information of different types.

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19. The handover control method according to claim 17, wherein said step of transferring a communication context includes transferring said communication context to a radio base station to which said radio terminal is connected after the handover in response to a request from said radio terminal.

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20. The handover control method according to claim 17, wherein said communication context is transferred between said radio base stations in one of a one-to-one communication and a one-to-multiple communication at the handover of said radio terminal.

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21. The handover control method according to any of claims 17 to 20, wherein:

said communication context comprises a plurality of pieces of context information of different types related to said radio terminal, and a context information identifier; and

said context information comprises a sub-context identifier and sub-context information.

22. The handover control method according to claim 21, wherein said context information includes at least one of terminal capability information indicative of functions of said radio terminal, authentication information corresponding to said radio terminal, encryption information, communication quality information indicative of a communication service quality, and header compression information utilized when a header of transmission/reception data is compressed.

23. The handover control method according to claim 21, wherein said sub-context information includes at least one of data flow identification information, an ensured delay time, a requested delay time, an ensured communication bandwidth, and a requested bandwidth.

24. The handover control method according to claim 21, wherein said sub-context information includes at least one of compressed header information, and mask information indicative of a position of a header to be compressed.

25. A program for causing a computer to execute a handover control method for a radio access communication system including a plurality of radio base stations and a radio terminal capable of communicating with said radio base stations,

said program characterized by causing a computer to execute processing for transferring a communication context required for a communication with said radio terminal from a radio base station connected to said radio terminal before a handover for changing a radio base station, to which said radio terminal connects, to another radio base station to which said radio terminal is connected after the handover.

26. The program according to claim 25, causing a computer to execute processing for transferring a communication context comprising a plurality of pieces of context information of different types when said computer is caused to execute the processing for transferring the communication context.